

AMENDMENTS TO THE CLAIMS

In accordance with the PTO's amendment format, a detailed listing of all claims has been provided. A status identifier is provided for each claim in parentheses following each claim number. Changes to the claims are shown by strikethrough or double bracketing (for deleted text) or underlining (for added text).

In the Claims:

Claims 1-33 were previously pending.

Claims 1-22 are allowed.

Please amend claims 23, 26-28, 30-33 as shown below.

No claims are canceled.

No new claims are added.

Claims 1-33 are pending.

1 **Claims:**

2 1. (Previously presented) A method comprising:
3 selectively aligning at least two image based rendering (IBR) image
4 data along a specific direction; and
5 selectively rebinning the aligned IBR image data to form a multi-
6 perspective panorama by determining at least one displacement vector
7 associated with the at least two IBR image data and subdividing at least one
8 of the IBR image data based on the displacement vector and combining
9 specific portions selected from each IBR image data to form at least a
10 portion of the multi-perspective panorama.

11
12 2. (original) The method as recited in Claim 1, wherein the
13 IBR image data includes concentric mosaic (COM) image data.

14
15 3. (original) The method as recited in Claim 2, wherein the
16 specific direction is substantially a horizontal direction with respect to a
17 captured scene.

18
19 4. (original) The method as recited in Claim 1, wherein
20 selectively aligning the at least two image based rendering (IBR) image data
21 further includes pair-wise aligning of concentric mosaic (COM) image data.
22
23
24
25

1 5. (Previously presented) The method as recited in
2 Claim 1, wherein selectively rebinning the aligned IBR image data to form
3 the multi-perspective panorama further includes:

4 subdividing each of the IBR image data into a plurality of portions.

5
6 6. (Previously presented) The method as recited in Claim 5,
7 wherein subdividing each of the IBR image data into the plurality of
8 portions further includes subdividing the IBR image data based on a
9 magnitude of the displacement vector.

10
11 7. (original) The method as recited in Claim 6, wherein the
12 displacement vector is a motion vector.

13
14 8. (original) The method as recited in Claim 6, wherein
15 determining at least one displacement vector further includes setting the
16 displacement vector for each of the at least two IBR image data to be of
17 equal magnitude so as to support a simple rebinning process.

18
19 9. (original) The method as recited in Claim 6, wherein
20 determining at least one displacement vector further includes setting the
21 displacement vector for each of the at least two IBR image data to be of
22 different magnitude while supporting a smart rebinning process.

23
24 10. (original) The method as recited in Claim 1, further
25 comprising:

1 generating a set of multi-perspective panoramas to provide a dense
2 representation of an IBR captured environment.

3
4 11. (original) The method as recited in Claim 10, further
5 comprising:

6 encoding at least a portion of the multi-perspective panoramas using
7 a 3D wavelet transform.

8
9 12. (Previously presented) A computer-readable
10 medium having instructions for performing the steps of:

11 selectively aligning at least two image based rendering (IBR) image
12 data along a specific direction; and

13 selectively rebinning the aligned IBR image data to form a multi-
14 perspective panorama by determining at least one displacement vector
15 associated with the at least two IBR image data and subdividing at least one
16 of the IBR image data based on the displacement vector and combining
17 specific portions selected from each IBR image data to form at least a
18 portion of the multi-perspective panorama.

19
20 13. (original) The computer-readable medium as recited in
21 Claim 12, wherein the IBR image data includes concentric mosaic (COM)
22 image data.

1 14. (original) The computer-readable medium as recited in
2 Claim 13, wherein the specific direction is substantially a horizontal
3 direction with respect to a captured scene.
4

5 15. (original) The computer-readable medium as recited in
6 Claim 12, wherein selectively aligning the at least two image based
7 rendering (IBR) image data further includes pair-wise aligning of
8 concentric mosaic (COM) image data.
9

10 16. (Previously presented) The computer-readable
11 medium as recited in Claim 12, wherein selectively rebinning the aligned
12 IBR image data to form the multi-perspective panorama further includes:
13 subdividing each of the IBR image data into a plurality of portions.
14

15 17. (Previously presented) The computer-readable
16 medium as recited in Claim 16, wherein subdividing each of the IBR image
17 data into the plurality of portions further includes subdividing the IBR
18 image data based on a magnitude of the displacement vector.
19

20 18. (original) The computer-readable medium as recited in
21 Claim 17, wherein the displacement vector is a motion vector.
22

23 19. (original) The computer-readable medium as recited in
24 Claim 17, wherein determining at least one displacement vector further
25 includes setting the displacement vector for each of the at least two IBR

1 image data to be of equal magnitude so as to support a simple rebinning
2 process.

3
4 20. (original) The computer-readable medium as recited in
5 Claim 17, wherein determining at least one displacement vector further
6 includes setting the displacement vector for each of the at least two IBR
7 image data to be of different magnitude while supporting a smart rebinning
8 process.

9
10 21. (original) The computer-readable medium as recited in
11 Claim 12, further comprising instructions for:

12 generating a set of multi-perspective panoramas to provide a dense
13 representation of an IBR captured environment.

14
15 22. (original) The computer-readable medium as recited in
16 Claim 21, further comprising instructions for:

17 encoding at least a portion of the multi-perspective panoramas using
18 a 3D wavelet transform.

19
20 23. (Currently amended) An apparatus comprising:

21 ~~at least one processing unit configured to~~

22 a first logic module to selectively align at least two image based
23 rendering (IBR) image data along a specific direction, and ; and

24 a second logic module to selectively rebin the aligned IBR image
25 data to form a multi-perspective panorama by determining at least one

1 displacement vector associated with the at least two IBR image data and
2 subdividing at least one of the IBR image data based on the displacement
3 vector and combining specific portions selected from each IBR image data
4 to form at least a portion of the multi-perspective panorama.

5
6 24. (original) The apparatus as recited in Claim 23, wherein
7 the IBR image data includes concentric mosaic (COM) image data.

8
9 25. (original) The apparatus as recited in Claim 24, wherein
10 the specific direction is substantially a horizontal direction with respect to a
11 captured scene.

12
13 26. (Currently amended) The apparatus as recited in Claim
14 23, wherein the ~~processing unit~~ first logic module is further configured to
15 pair-wise align [[of]] concentric mosaic (COM) image data.

16
17 27. (Currently amended) The apparatus as recited in Claim
18 23, wherein the ~~processing unit~~ second logic module is further configured
19 to subdivide each of the IBR image data into a plurality of portions.

20
21 28. (Currently amended) The apparatus as recited in Claim
22 27, wherein the ~~processing unit~~ second logic module is further configured
23 to subdivide the IBR image data based on a magnitude of the displacement
24 vector.

1 29. (original) The apparatus as recited in Claim 28, wherein
2 the displacement vector is a motion vector.

3
4 30. (Currently amended) The apparatus as recited in Claim
5 28, wherein the ~~processing unit~~ second logic module is ~~further configured~~
6 ~~to set~~ the displacement vector for each of the at least two IBR image data
7 to be of equal magnitude so as to support a simple rebinning process.

8
9 31. (Currently amended) The apparatus as recited in Claim
10 28, wherein the ~~processing unit~~ second logic module is ~~further configured~~
11 ~~to set~~ the displacement vector for each of the at least two IBR image data
12 to be of different magnitude while supporting a smart rebinning process.

13
14 32. (Currently amended) The apparatus as recited in Claim
15 23, wherein the ~~processing unit~~ second logic module is further configured
16 to generate a set of multi-perspective panoramas to provide a dense
17 representation of an IBR captured environment.

18
19 33. (Currently amended) The apparatus as recited in Claim
20 32, wherein the ~~processing unit~~ second logic module is further configured
21 to encode at least a portion of the multi-perspective panoramas using a 3D
22 wavelet transform.